郵輪廣告效益之研究 — 從香港海事相關 科系學生觀點

An Evaluation of Cruise Line Advertising Effectiveness: Evidence from Maritime Students' Perceptions in Hong Kong

摘要

之后 全來,隨著郵輪觀光產業的發展,有效的廣告效益去吸引顧客是郵輪 公司重要課題之一。此文研究目的在從香港海事相關科系學生觀點, 探討郵輪手機廣告之效益及其對於學生購買意願之影響。資料蒐集採問卷調 查方式,來自 153 位香港海事相關科系的學生,應用探索式因素分析、驗證 式因素分析及結構方程模式分析,研究分析結果得出「感性訴求」及「廣告創 意」對於學生「郵輪偏向態度」有正向的影響,而學生「郵輪偏向態度」對於 郵輪購買意願有正向的影響關係,此研究結果可提供郵輪手機廣告行銷實務 上及理論研究上之參考。

關鍵字:郵輪、廣告效益、態度、購買意願

Abstract

Cruise tourism has become a popular and growing sector recently. An effective advertising is vital for cruise lines to attract customers. This study empirically

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examines the advertising effectiveness of mobile phone on increasing the purchase intention of potential customers for cruise service. Using data collected from questionnaire surveys from 153 maritime student in Hong Kong. Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equational Model (SEM) have been conducted to test crucial factors and research hypotheses. Results indicated that emotional appeal and advertising creativity positively influences students' attitude toward cruise, whereas attitude toward cruise service positively influences the purchase intention of cruise services. This paper then provides both practical and theoretical implications for enhancing the cruise line advertising effectiveness on mobile phone marketing.

Keywords: Cruise line, Advertising effectiveness, Attitude, Purchase intention

1. INTRODUCTION

Cruise industry is a favored, profitable and rapidly growing sector of the tourism industry (Han and Hyun, 2019). Apart from job creation, it produces enormous amount of income in different countries around the world (Sun et al., 2014). According to the Cruise Line International Association (CLIA) (2016), while cruise industry is estimated to grow at an annual rate of 4.5% from 2016 to 2017, and 25.8 million passengers are expected to purchase cruise service, intense competition occurs in the industry, with cruise lines expecting to invest more than \$6.8 billion in new ocean vessels in 2017. Hong Kong is an Asia Pacific cruise center, and is one of the most preferable ports of call for cruise ships and passengers (Sun et al., 2014).

The new Kai Tak Cruise Terminal handled more than 100,000 cruise passengers in 2014, and was estimated to handle around 220,000 and 350,000 passengers in 2015 and 2016 respectively (Wong et al., 2016). Besides, the number of cruise lines calling at Kai Tak Cruise Terminal was scheduled to increase from 8 in 2014 to 18 in 2016 (Bent, as cited in Wong et al., 2016). Hong Kong has also made enormous investment in providing new facilities to accommodate more and larger ships for cruise industry (CINQ, as cited in Sun et al., 2014). According to the report from Hong Kong Tourism Board (HKTB) (2019), the number of cruise passenger throughput in Hong Kong had significantly increased from 191,062 visitors in 2013 to 875,212 visitors in 2018. HKTB has devoted efforts to promote the cruise tourism industry. The development of cruise industry is critical and greatly contributes to Hong Kong's economy.

Effective advertising is important for cruise lines to develop and enhance their competitiveness in the market (Martin and Vincent, 2014). Advertising effectiveness depends not only on the nature of the product or service, but also the quality of the advertisement (Malthouse et al., 2007). An effective advertisement affects attitude towards the advertised product or service, and intention to purchase the advertised product or service (Nysveen and Breivik, 2005). Advertising effectiveness is crucial in influencing consumer behavior in various industries (De Pelsmackeret al., 2002). Flourishing development of cruise lines in the market also depends on the effectiveness of their advertisements. If cruise passengers perceive a positive image through cruise commercials, they are more likely to have a favorable attitude towards the cruise lines, and willing to have a cruise experience (Hwang and Hyun, 2016). This highlights the significance of effective advertising for companies in cruise industry. Besides, while attitude of university students is a critical segment in consumer markets, lots of companies have been designing advertisement, including mobile advertising,

to target students (Rahman, 2016). CILA (2017) indicates that cruise travel will gain traction among younger generations more than ever before, especially Millennials. Thus, cruise lines should implement new strategies to target young passengers with effective advertisement.

Most previous research on cruise line have assessed it from different aspects, but advertising effectiveness of cruise line has not been investigated in previous studies. A considerable amount of studies has been focusing on motivations for cruise passengers. Han and Hyun (2019) proposed a supported conceptual framework on cruise travel motivations and repeat cruising intentions, while there was an investigation on the importance of traveling motivating and destination attributing factors, and the relationship between them in the decisionmaking process of cruise passengers (Whyte, 2017). Also, country-of-origin and brand effects of cruise lines were examined on quality perception, attitude and purchase intention of cruise service consumers (Ahmed et al., 2002). Besides, a few studies have been investigating on cruise market and attributes influencing the decision-making of cruise lines. Chen et al. (2016) analyzed the relationship between willingness-topay of cruise passengers and regional level

variables, socio-demographic variables, cruise perception variables, cruise motivations and cruise preferences in the growing Asian market. Apart from that, while Ryschka et al. (2016) indicated the effect of social media on reputation of cruise lines, Xie et al. (2012) revealed different attributes of a cruise ship that influence the decision-making of cruise lines. There was also a study on perceived firm innovativeness in affecting the experience of cruise passengers and their perceived luxury value (Hwang and Hyun, 2016). Therefore, cruise line advertising effectiveness will be investigated in this study.

Besides investigating the impacts of advertising effectiveness, various research have been focusing on effective advertisement of media other than mobile phone video. There was an investigation on the influence of effective advertisement on attitude, cognition and emotion of consumers (Eisend and Tarrahi, 2016). Apart from that, a considerable number of studies have been examining advertising effectiveness of diverse media. Mobile advertising effectiveness has been investigated by various researchers, but with focus only on mobile phone messages (Park et al., 2008; Martínez-Ruiz et al., 2017). Also, effectiveness of advertisement has been examined on websites, social media and online games banners (Bhat et al., 2002; Goldsmith and Lafferty, 2002; Yeu et al., 2013; Lee and Hong, 2016). In addition, Wilson and Till (2008) have explored advertising effectiveness of the transit areas in airports. Nevertheless, there is a similar research on online video advertising effectiveness, with the center of research on length, informativeness and humor of the video (Goodrich et al., 2015). Thus, advertising effectiveness of mobile phone video will be examined in this study.

This study investigates the indicators of advertising effectiveness of mobile phone video on increasing the purchase intention of university students for cruise service in Hong Kong. Hong Kong is a cruise center, and a favored port of calls for cruise lines and passengers. While mobile phone video has become more popular for businesses to promote their products or services, it is significant to examine the factors influencing the effectiveness of mobile phone video advertisement in cruise commercials. Besides, since young generations have been increasing the purchase of cruise service, with university students becoming an important segment in the market, indicators of advertising effectiveness of cruise line mobile phone video affected by university students is worthy to be considered.

Accordingly, the objectives of this study are to assess the mobile phone advertising effectiveness and its impact on purchase intention from the viewpoint of university students, and present recommendations for improving advertising effectiveness of mobile phone video to cruise lines. There are five sections in this paper. After the introduction, there is a literature review section which reviews the previous studies on the indicators of cruise line advertising effectiveness, consumers' attitude towards cruise line and purchase intention of the consumers. The next section explains the design of the study, with description on study samples, measurement items and research methodology. The fourth section indicates the findings from descriptive statistics, exploratory factor analysis and confirmatory factor analysis. At the end, conclusion drawn from the finding and their implications for cruise line advertising effectiveness are discussed.

2. LITERATURE REVIEW

2.1 Media of Advertising

Newspapers, magazines, TV and radio are the traditional media of advertising (Park et al., 2008). Advertising can be classified

into pull-type and push-type (Unni and Harmon, 2007). Pull-type advertisement means the advertised message will be delivered to the consumers on their request, requiring initiative involvement. Generally speaking, the newspapers and magazines are the pull-type advertising media. On the contrary, push-type advertisement is the information delivered by the advertiser based on the estimated preferences and needs of consumers. TV and radio are the examples.

Traditional media is usually formatted, while online advertising supports different additional media, including banners, popups, hyperlinks, websites, and mobile advertisement (Rodgers and Thorson, 2000). Online advertising medias can improve the interactivity between advertisers and consumers, achieving a higher degree of personalization of advertised contents (Chen and Hsieh, 2012).

Among the online advertising media, mobile phone is a common form of advertising. Mobile advertising is defined as a form of advertising that communicate with consumers/users via mobile phones, including banner, poster, interstitial, Short Message Service (SMS), Multimedia Messaging Service (MMS) and mobile video advertisement (Mobile marketing Association, 2008).

Gao et al. (2010) proposed the elements of mobile advertising. The utilization of mobile advertisement allows users to control the timing, sequence and content of communication, which ease of information delivering. It facilitates two-way and interpersonal communication, allowing users to provide feedback. Mobile phones also improve the synchronicity of the message delivery and connectedness between customers and products. With higher level of playfulness, it can encourage participation and attract the attention of users and consumers on the mobile advertisement.

2.2 Advertising Effectiveness

Advertising effectiveness is an assessment on the advertised messages that measures to what extent consumers are able to receive and accept the messages, and to what extent the messages meet customers' requests (Lai et al., 2015; Gupta et al., 2017). It is a long-term concept, focusing on cumulative attitudes, perceptions and behaviours (Wells, 2014).

Gupta et al. (2017) adopted AIDA (Attention, interest, desire and action) Model to evaluate advertising effectiveness. It is expected that the advertisement can first grab the attention of customer and then arouse their interest. After the attitudes being affected,

customers may develop the desire to purchase the product or service (purchase intention) and ultimately action.

The customers will discover the value of advertisements when the advertised contents are relevant to their wants and needs, which is an assessment of the worthiness of the advertising (Dehghani, 2016). Advertising effectiveness can be explained in three stages, which are cognitive stage, affective stage and conative stage (Grigaliunaite and Pileliene, 2016). Cognitive stage is related to advertisement awareness of customers. Attention to the advertisements can be measured by the level of recall and recognition. Affective stage indicates the attitude towards the advertisement which can further influence their attitude towards the brand being advertised, while conative stage represents the purchase intention.

Lee and Hong (2016) proposed different components representing the cognitive stage, which are emotional appeal, informativeness and advertising creativity. Advertising creativity and informativeness are fundamental elements affecting the attitude and behaviors of customers (Goodrich et al., 2015; Lee and Hong, 2016). On the other hand, there is favourable impacts on the attitude of customers if the advertised service has greater emotional appeal (Lee

and Hong, 2016). Accordingly, emotional appeal, informativeness and advertising creativity are the components to evaluate the advertising effectiveness in this study. Based on the previous literature review, this research proposes a theoretical framework as shown in Figure 1.

2.3 Attitude towards Cruise Service and Purchase Intention

The relationship between attitude towards cruise service and purchase intention can be supported by two commonly used theories, namely the theory of reasoned action (TRA) and the theory of planned behavior (TPB). The theories indicate one of the direct factors that determine behavioral

intentions is attitude towards performing the behavior (Montano and Kasprzyk, 2015). In definition, attitude is an individual's belief regarding to the consequences of acting the behavior, while behavioral intention is the possibility to perform the respective behavior (Ajzen, 1991). By applying the theories to this study, the behavior to be investigated is purchase. Purchase intention is the probability controlled by the consumers who intend to buy the particular product (Dehghani and Tumer, 2015). Enormous number of scholars have been studying the relationship in different contexts. For instance, consumers' intention to purchase from internet store will be increased if they have favorable attitudes towards it (Jarvenpaa et al., 2000). Another example is that positive

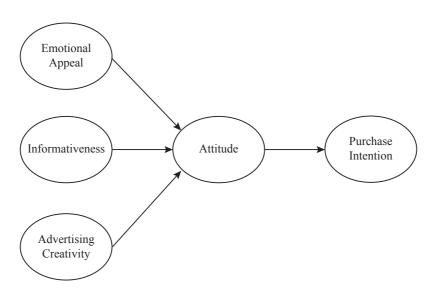


Figure 1 Theoretical framework

attitude towards organic products will lead to a higher purchase intention on those products (Yeon and Chung, 2011). By applying similar studies into cruise service, it is proposed that:

Hypothesis 1. Student's attitude towards cruise service is positively related to his or her purchase intention on cruise service.

2.4 Emotional Appeal and Attitude towards Cruise Service

Emotional appeal is grounded in the emotional, experiential perception of consumption, which refers to the customer feel good about the product or service (Albers-Miller and Royne, 1999). Emotional appeal in advertisement can be thought as responses of the audiences by positive (e.g. joy, love and pride) or negative (e.g. fear, sad and anger) emotional content (Lee and Hong, 2016; Grigaliunaite and Pileliene, 2016). Different kinds of event, campaign and reallife situation are applied in the advertisement to create values for the advertised subject psychologically (Rizwan et al., 2013). Scholars have explored on the effects of emotional appeal, and the results showed that positive reaction and high level of recall by audiences can be achieved (Albers-Miller and Royne, 1999). Previous studies further

indicate that emotional appeal is more suitable for hedonic product or service than rational appeal (Armstrong, 2010). As with similar studies, it is argued that there is a positive relationship between emotional appeal and attitude towards cruise service. Therefore, the second hypothesis proposed in this research is that:

Hypothesis 2. Emotional appeal in advertisement is positively related to student's attitude toward cruise services.

2.5 Informativeness and Attitude towards Cruise Service

Informativeness is another important element in measuring advertising effectiveness. It is the ability to attract audiences by providing information as much detail as possible (Huq et al., 2015). It can also be treated as the base of a person's belief, which is an important factor to determine attitudes (Wong, 2010). Previous studies found that helpful information appeared in the advertisement will be less intrusive to the audiences. It is further investigated that informativeness has direct positive influence on perceptions of the advertised products, and further results in proactive response by the audiences to the message (Wang et al., 2002;

Blanco et al., 2010; Goodrich et al, 2015). Especially for advertisement via mobile, the information delivered should show elements such as timeliness, accuracy and usefulness to the audiences (Xu, 2006). By applying the mentioned studies into this research, the third hypothesis to be carried out is that:

Hypothesis 3. Informativeness in advertisement is positively related to student's attitude towards cruise services.

2.6 Advertising Creativity and Attitude towards Cruise Service

In terms of advertising, creativity can be identified as novel, original and divergent thinking (Till and Baack, 2005; Reinartz and Saffert, 2013). It is described as a problemsolving action motivated by business marketing and competition, with a function of attracting audiences and further arousing the purchase intention (White and Smith, 2001). Reinartz and Saffert (2013) also admit that audience's attention will be grabbed and will further generate positive attitude towards the featured products. Different studies proved the positive relationship between advertising creativity and the attitude of the audience. An analysis showed that in a crowded market with similar products or services,

advertising creativity has a great effort in signaling the brand as well as the product to the audiences (Dahlén et al., 2008). Another empirical study concluded that advertisement with the combination effect of divergence and relevance will lead to more favourable customers' processing and response (Smith et al., 2008). On the ground of the above studies, the fourth hypothesis proposes that:

Hypothesis 4. Advertising creativity is positively related to student's attitude towards cruise services.

3. METHODOLOGY

3.1 Sample

This study aims to investigate the indicators of mobile phone video advertising effectiveness on increasing the purchase intention of university students for cruise service in Hong Kong. The data for the research were collected from questionnaire survey. The survey was conducted via face-to-face interviews with random respondents after watching a selected cruise line commercial on mobile phone (see Appendix 1), and then data for empirical analysis were collected via Google Forms tool after respondents answer the questionnaire survey on a mobile phone.

A total of 153 university students at the Hong Kong Polytechnic University participated in the survey at the campus of the university over a period of five days from 26 Feb to 2 March in 2018.

3.2 Measures

Measurement items in the questionnaire survey are relating to the three indicators of advertising effectiveness, attitude towards cruise service and purchase intention discussed above which had been studied based on a review of different literatures of advertising and cruise industry. Also, students' perceived importance of cruise service and facilities, and their preferred areas via cruise have been measured. The questionnaire design adopts the different stages proposed by Churchill (1991). The final version of the questionnaire consisted of 16 items relative to 3 indicators of advertising effectiveness, attitude towards cruise service and purchase intention. It also consists of 21 items of cruise service and facilities and 16 items of areas via cruise. Firstly, emotional appeal refers to the strategy that leads to responses from the audience by positive or negative emotional composition, and the items were in accordance to David (1983) and Escalas and Stern (2003). Secondly, informativeness is the ability to arouse interest from the audience

by providing detailed information, and the items were based on Logan et al. (2012) and Pavlou et al. (2007). Next, advertising creativity refers to novel and original thinking embedded in an advertisement, and the items were from Haberland and Dacin (1992). Besides, the items of attitude towards cruise service were based on Holbrook and Batra (1987) while the items of purchase intention were from MacKenzie et al. (1986). Lastly, the items of cruise service and facilities were adapted from Xie et al. (2012) and items of areas via cruise were based on the popular ports and destinations in Asia (Cruise Buzz, 2018). Table 1 lists the items from the questionnaire used to measure different variables.

Respondents were asked to reveal the level of agreement they attached to each item of the 3 indicators of advertising effectiveness, attitude towards cruise service and purchase intention on a five-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Respondents were also asked to indicate the level of importance they attached to each cruise service and facilities item on a five-point Likert scale where 1 = not at all important and 5 = very important. Lastly, they were requested to demonstrate the level of preference they attached to each area via cruise item on a five-point Likert

 Table 1
 Variables and measure items

Variables and measure items	Sources
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
 Emotional Appeal After seeing this advertisement, I had intense feelings. I was emotionally attracted by the key massage of this advertisement. The emotional aspect of this advertisement leads me to like the advertisement. 	Davis (1983) Escalas and Stern (2003)
 Informativeness I received exclusive information from this advertisement. I would learn a lot from using the advertisement. The advertisement offered me data that I need to make my purchase decisions. 	Logan et al. (2012) Pavlou et al. (2007)
Advertising Creativity The advertisement is unique. The advertisement is really out of ordinary. The advertisement is intriguing. The advertisement is surprising.	Haberland and Dacin (1992)
Attitude towards Cruise Service The advertised cruise service was very good. I became interested in the cruise service after listening to/watching the advertisement. I thought that this cruise service was attractive when I saw its advertising.	Holbrook and Batra (1987)
Purchase Intention I would purchase this service within three years. It is worth purchasing this service. I would recommend cruise service to my friends/family	MacKenzie et al. (1986)
Cruise Service and Facilities Night clubs Games/contests/tournaments Casino Bars/lounges Shows/performances Sports platform Wall climbing Miniature golf Ball facilities Running/walking track Library Training/seminars Internet café/computer rooms Business/conference center Duty free stores Food and beverages Accommodation Spa Fitness center/gym Beauty salon Swimming pools/hot tubs/whirlpools	Xie et al. (2012)

scale where 1 = not at all preferred and 5 = most preferred.

3.3 Research Methods

A considerable number of research methods were being conducted in the investigation. Descriptive statistics and exploratory factor analysis were used in order to determine and summarize the 3 advertising effectiveness indicators into smaller, controllable set of underlying factors (Hair et al., 2010). A reliability test was managed to examine whether the items were sufficient. To examine the measurement models, Confirmatory factor analysis (CFA) was then used. This was involving the use of structural equation modeling software AMOS 6.0 to examine them, investigate psychometric properties, and indicate the relationships among the latent variables and the proposed measures. Besides, hypothesis test was conducted to test the four hypotheses. Finally, ANOVA was conducted to assess whether there is a difference existing between university students with different gender, education level and overseas travel budget on the level of agreement of the advertising effectiveness indicators.

4. RESULTS

4.1 Respondents' Profiles

Table 2 presents the information of respondent' profiles. There are 63 male (41.2%) and 90 female (58.8%) participants in investigation. Among 153 participants, most of the respondents (83.0%) own Undergraduate Degree, while 13.7% respondents are accepting education of Diploma of Associate Degree, and 3.3% has Postgraduate Degree. Table 2 also presents

Characteristics		Frequency	%
Gender	Male	63	41.2
	Female	90	58.8
Education Level	Diploma or Associate Degree	21	13.7
	Undergraduate Degree	127	83.0
	Postgraduate Degree	5	3.3
Travel Budget Overseas Per Year	s Per Year Less than HKD 5,000		17.0
	HKD 5,001-10,000	65	42.5
	HKD 10,001-20,000	48	31.4
	Greater than HKD 20,000	14	9.2

respondents' Travel Budget Overseas per year. The profile shows that around 17.0% respondents expect to spend less than HKD 5,000 per year on their overseas travel; 42.5% respondents state that their travel overseas budget is between the range of HKD 5,001 to HKD 10,000, and 31.4% are willing to budget HKD 10,001-20,000 as cost of journey, whilst 9.2% participants budget greater than HKD 20,000 when travel overseas per year.

4.2 Level of Agreement on the Latent Constructs

Respondents' level of agreement on three latent constructs was investigated, namely: Cruise line advertising effectiveness, attitude towards cruise service and purchase intention towards cruise service. The results were ranked by using mean scores of each statement, ranging from strongly disagree (score=1) to strongly agree (score=5).

In terms of cruise line advertising effectiveness, it was found that the top two statements with high level of agreement were:

"The emotional aspect of this advertisement leads me to like the advertisement" and "I was emotionally attracted by the key message of this advertisement", with mean scores higher than 3.50. In contrast, the lowest two statements were: "The advertisement offered me data that I need to make my purchase

decisions" and "I would learn a lot from using the advertisement", which gained means scores lower than 3.20. The results indicated that among the three measurements of cruise line advertising effectiveness (emotional appeal, informativeness, advertising creativity), emotional appeal was the most important indicator while informativeness was the least important indicator.

In terms of attitude towards cruise service, the top rank statement was "The advertised cruise service was very good", with the highest mean score of 3.80. For the statement with lowest level of agreement, "I became interested in the cruise service after listening to/watching the advertisement", the mean score was found to be 3.58. As all the three indicators were scored higher than 3.50, the results showed that in general, respondents agreed there will be changes in attitude towards cruise services after watching the advertisement.

In terms of purchase intention towards cruise service, statement which got the highest level of agreement was "It is worth purchasing this service" with a mean score of 3.08. For the lowest rank statement, "I would purchase this service within three years", the mean score was only 2.51. The results explained respondents were not aroused to purchase cruise service after watching the advertisement.

4.3 Importance of Cruise Service and Facilities

The level of importance of cruise service and facilities in view of respondents was analyzed and ranked by the mean scores, ranging from not at all important (score = 1) to very important (score = 5), as shown in Table 3. The top two options, food and beverages and accommodation, got 4.65 and 4.56 respectively. While the following three options also got mean scores over 4.00, which

were: swimming pools/hot tubs/whirlpools, shows/performances and spa. Conversely, miniature golf, library and training/seminars were ranked as the least important services and facilities, with means scores lower than 3.00. The results indicated that core attributes remain the most important elements for cruise service and facilities in view of respondents, and Fitness Attributes are also relatively important. Meanwhile, supplementary attributes were found relatively less important to the respondents.

Table 3 Respondents' importance of cruise service and facilities

Ranking	Items	Mean	SD
1	Food and beverages	4.65	0.66
2	Accommodation	4.56	0.80
3	Swimming pools/hot tubs/whirlpools	4.22	0.86
4	Shows/performances	4.15	0.82
5	Spa	4.13	0.87
6	Internet café/computer rooms	3.98	0.93
7	Games/contests/tournaments	3.93	0.89
8	Sports platform	3.92	0.96
9	Fitness center/gym	3.87	0.97
10	Bars/lounges	3.82	1.06
11	Duty free stores	3.63	1.02
12	Beauty salon	3.59	1.07
13	Ball facilities	3.56	1.01
14	Running/walking track	3.52	1.05
15	Wall climbing	3.20	1.09
16	Casino	3.10	1.20
17	Business/conference center	3.07	1.15
18	Night clubs	3.05	1.23
19	Miniature golf	2.99	1.08
20	Library	2.85	1.12
21	Training/seminars	2.82	1.07

4.4 Preference of Areas via Cruise

Respondents' preference of areas for cruise was presented in Table 4, which was ranked according to the mean scores indicating the range from not at all preferred (score = 1) to most preferred (score = 5). The most preferred area was Japan, with a mean score of 4.27. Following was Taiwan, South Korea and Singapore, three of them got mean scores higher than 3.50. In opposite, all regions in China got mean scores lower than 3.00. The results indicated that large proportion of respondents prefer to choose regions outside China for cruise service.

Table 4 Respondents' preference of areas via cruise

Ranking	Areas	Mean	SD
1	Japan	4.27	0.98
2	Taiwan	3.96	1.03
3	South Korea	3.74	1.05
4	Singapore	3.53	0.98
5	Malaysia	3.24	1.13
6	Vietnam	3.13	1.12
7	Shanghai, China	2.88	1.23
8	Cambodia	2.64	1.12
9	Sanya, China	2.62	1.21
10	Qingdao, China	2.55	1.08
11	Philippines	2.41	1.05
12	Tianjin, China	2.39	1.11
13	Dalian, China	2.39	1.07
14	Indonesia	2.38	1.11
15	Haikou, China	2.35	1.05
16	Xiamen, China	2.35	1.07

4.5 Exploratory Factor Analysis (EFA)

EFA was conducted to examine the structure of data, extracting the latent factors from measured variables (Osborne and Banjanovic, 2016). The sample size to number of items ratio should be 10:1, recommended by Hair et al. (2010). In this study, the sample size is 153 respondents while there are six items, which exceeded the recommended level. Yong and Pearce (2013) indicated that the appropriate level of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) should be above 0.5 and P < 0.05to be significant. The KMO is 0.765 and Bartlett's Test of Sphericity was significant [χ = 344.5, P < 0.00], which is exceeded the suggested level. Eigenvalues with value larger than 1.0 represented the number of factors to be extracted (Kootstra, 2004). Factor loadings were significant when it is larger than 0.5 (Samuels, 2016). According to Yong and Pearce (2013), high factor loading value means the factors can best explained by the measured variables. The two extracted factors represented 57.64% of the total variance. Among the variables, four variables from two factors with factor loadings below 0.5 were deleted from further analysis, including the latent factor "informativeness" and an

observed variable in the factor of advertising creativity, named "The advertisement is intriguing".

Further analysis of the six remaining factors represented 73.46% of the total variance. Cronbach's Alpha is used to test the reliability, ensuring the data used is reliable and consistent. The reliability of the two factors were above 0.79, which had reached the satisfactory level. The factors were labelled and described as following:

1. Factor 1, emotional appeal, containing three indicators: "After seeing this advertisement, I had intense feelings", "I was emotionally attracted by the key message of this advertisement" and "The emotional aspect of this advertisement leads me to like the advertisement". Referring to Table 5, E1 has the highest

- factor loading which accounted for 50.46% of the total variance
- 2. Factor 2, advertising creativity, containing three indicators: "The advertisement is unique", "The advertisement is really out of ordinary" and "The advertisement is surprising". According to Table 5, E7 has the highest factor loading which accounted for 23% of the total variance.

Among the two factors, emotional appeal is more important to the cruise line advertising effectiveness as it has a higher mean (3.47).

In the section of the "Factor Analysis to Identify Factors or Dimensions Underlying Cruise Service and Facilities", the ratio of sample size (153 respondents) to the number of items is 9.56:1, which is below the preferred ratio (10:1) advocated by Hair

Table 5 Factor analysis to identify factors or dimensions underlying cruise line advertising effectiveness

	Statements	Factor 1	Factor 2
E1	After seeing this advertisement, I had intense feelings.	0.857	0.095
E2	I was emotionally attracted by the key message of this advertisement.	0.854	0.146
E3	The emotional aspect of this advertisement leads me to like the advertisement.	0.826	0.229
E7	The advertisement is unique.	0.070	0.863
E8	The advertisement is really out of ordinary.	0.111	0.847
E10	The advertisement is surprising.	0.356	0.757
	Eigenvalues	3.03	1.38
	Percentage variance (%)	50.46	23.00
	Accumulated percentage variance (%)	50.46	73.46
	Cronbach's Alpha	0.83	0.79
	Mean	3.47	3.23
	S.D.	0.77	0.77

et al. (2010). However, this ratio is closed to 10:1, and also beyond the ratio recommend by Hatcher and Gorsuch (Osborne and Costello, 2004). The data were sufficiently suitable for factor analysis based on the value of Kaiser-Meyer-Olkin measure of sampling adequacy (= 0.815). Bartlett's Test of Sphericity was significant [$\chi^2 = 1342.97$, P < 0.01], which is above the recommended level. All Eigenvalues were larger than 1.0 presenting the number of factors to be extracted (Kootstra, 2004). Hair et al. (2010) declared that it was ideal if the values of factor loading were larger than 0.5 because the larger the factor loading's absolute size, the more significant the loading factor is in explaining the factor matrix. A five-factors solution, which was generated in the first analysis, accounted the value of accumulated variance for 62.11%. However, there was rendered problematic on the ground that five items' loading factor values were below 0.5 when loading on four factors. These items included Games/contests/tournaments, shows/performances, running/ walking track, internet café/computer rooms, and duty free stores; due to the low relevance, they were removed in the following analysis.

The further analysis of the 16 remaining items generated five factors/dimensions. An accumulated variance of this analysis was

accounted for around 69.80%. In order to test the reliability and consistency of these factors, Cronbach's Alpha statistic was utilized in this analysis; the values of each reliability factor were above the value of 0.75, which were considered as a desirable level of consistency and reliability in the research (Nunnally, 1978). Five factors were showed as followed:

- 1. Factor 1 is Fitness Attributes, which includes spa, fitness certre/gym, beauty salon and swimming pools/hot tubs/whirlpools. The highest factor loading on this dimension is beauty salon (=0.809) while the total variance was accounted for 30.50%.
- 2. Factor 2 is Recreation and Sport Attributes, which includes sports platform, wall climbing, miniature golf and ball facilities. The highest factor loading on this dimension is wall climbing (=0.874) while the total variance was accounted for 14.19%.
- **3.** Factor 3 is Entertainment Attributes, which includes night clubs, casino, and bars/lounges. The highest factor loading on this dimension is bars/lounges (0.819) while the total variance was accounted for 10.95%.
- **4.** Factor 4 is Supplementary Attributes, which includes library, training/seminars, and business/conference centre. The

- highest factor loading on this dimension is training /seminar (=0.826) while the total variance was accounted for 7.75%.
- 5. Factor 5 is Core Attributes, which includes food and beverage and accommodation. The highest factor loading on this dimension is food and beverage (=0.869) while the total variance was accounted for 6.40%.

Table 6 also indicates that the Core Attribute had the highest mean (= 4.61), and

this is considered as the most significant by respondent among these six factors, and the item of food and beverage was treated as precedence among the cruise service and facilities.

4.6 Confirmatory Factor Analysis (CFA)

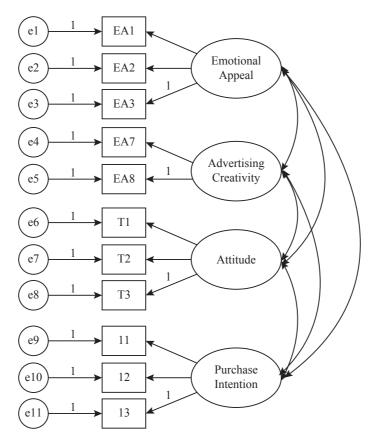
Confirmatory Factor Analysis (CFA) was conducted to test the four constructs in the measurement model, which are emotional

Table 6 Factor analysis to identify factors or dimensions underlying cruise service and facilities

	Options	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
L18	Spa	0.729	0.204	0.158	-0.077	0.260
L19	Fitness center/gym	0.801	0.173	0.192	0.110	0.133
L20	Beauty salon	0.809	-0.074	0.234	0.273	-0.020
L21	Swimming pools/hot tubs/whirpools	0.521	0.278	0.254	0.032	0.356
L6	Sports platform	0.385	0.652	0.123	0.077	0.192
L7	Wall climbing	0.092	0.874	-0.151	0.049	0.055
L8	Miniature golf	-0.011	0.693	0.132	0.357	-0.107
L9	Ball facilities	0.110	0.693	0.208	0.198	0.184
L1	Night clubs	0.239	0.081	0.767	0.082	-0.081
L3	Casino	0.170	0.076	0.782	-0.029	0.007
L4	Bars/lounges	0.182	0.027	0.819	0.047	0.203
L11	Library	0.054	0.134	-0.230	0.789	0.021
L12	Training/seminars	0.204	0.222	0.065	0.826	-0.090
L14	Business/conference center	0.016	0.149	0.341	0.757	0.121
L16	Food and beverages	0.147	0.025	0.034	-0.074	0.869
L17	Accommodation	0.169	0.138	0.027	0.093	0.801
	Eigenvalues	4.88	2.27	1.75	1.24	1.02
	Percentage variance (%)	30.50	14.19	10.95	7.75	6.40
	Accumulated percentage variance (%)	30.50	44.69	55.64	63.39	69.79
	Cronbach's Alpha	0.80	0.78	0.78	0.76	0.69
	Mean	3.95	3.42	3.32	2.91	4.61
	S.D.	0.75	0.80	0.97	0.92	0.64

appeal, advertising creativity, attitude towards cruise service and purchase intention. Under CFA, unidimensionality, convergent validity and divergent validity of the scales applied in the study are tested. Unidimensionality is the presence of a construct underlying a set of items. One of the loadings in each construct is set to a fixed value of 1.0 to allow the comparison in the construct. Figure 2 presents the measurement model where the four latent

constructs (emotional appeal, advertising creativity, attitude towards cruise service and purchase intention) consisting of their corresponding indicators. Eleven observed variables were enclosed in squares. Three observed variables (EA1-EA3) were loaded onto emotional appeal; two observed variables (EA7-EA8) were loaded onto advertising creativity; three observed variables (T1-T3) were loaded onto attitude towards cruise



Note: E1-E3 and E7-E8 are cruise line advertising effectiveness indicators; T1-T3 are attitude towards cruise service indicators; I1-I3 are purchase intentions towards cruise service indicators; e1-e11 are error indicators.

Figure 2 Path diagram representing initial model

service, and three observed variables (I1-I3) were loaded onto purchase intention. Standardized residual covariances and model fit indices are included in the statistics criteria for model modification decisions.

4.6.1 Standardized Residuals

For standardized residuals, a value higher than -2.58 or lower than 2.58 are significant at the 0.05 significance level. The standardized residual values of various items exceeded 2.58, which are EA4, EA5, EA6, EA9 and EA10. Hence, these items were excluded in the revised model. To examine fit and unidimensionality of the model, different goodness-of-fit indices were adopted, including goodness-of-fit index (GFI), comparative fit index (CFI), adjusted goodness-of-fit index (AGFI), root mean square residual (RMSR), and root-mean-square-error of approximation (RMSEA). The normed chi-square $(X^2/$ df) value was 1.889, and GFI and CFI value were 0.917 and 0.957 respectively, which were above the recommended level of 0.9. AGFI value was 0.866, which was higher than the recommended level of 0.8. RMSR and RMSEA value were 0.093 and 0.076 respectively, which were below their respective recommended threshold level of 0.1 and 0.08. Therefore, CFA of the final

model is at an acceptable fit level, and all item loadings were significant (see Table 7).

4.6.2 Convergent Validity

Convergent validity was demonstrated by testing significant factor loadings on each construct. Convergent validity was tested by *t*-value, which is the critical ratio (CR) in AMOS. A *t*-value higher than –1.96 or lower than 1.96 indicates statistical significance. Since CR values were significant at the 0.05 level, they provided solid evidence of the convergent validity and unidimensionality of each construct.

4.6.3 Discriminant Validity

Discriminant validity was examined to ensure that constructs were distinct from each other. It can be proved to be adequate by an Average Variance Extracted (AVE) analysis, which square root of AVE of a latent construct is larger than the correlation with the latent constructs remaining (Zait and Bertea, 2011). In Table 8, it was shown that the square roots of AVE of all four constructs were larger than the correlation with the remaining latent constructs, confirming discriminant validity.

4.6.4 Composite Reliability and Average Variance Extracted

Composite reliability (CR) was assessed to measure the reliability and internal consistency of a latent construct. It is required

Parameter estimates, standard errors, critical ratio, and R²

Factors and scale items	Unstandardized factor loading	Completely standardized factor loading	Standard error ^a (SE)	Critical ratio ^b (CR)	\mathbb{R}^2	
Emotional Appeal						
EA1	0.966	0.736	0.106	9.158	0.541	
EA2	1.183	0.820	0.115	10.275	0.673	
EA3	1.000	0.789	c	_	0.623	
Advertising Creativity						
EA7	2.137	1.033	1.316	1.624	1.068	
EA8	1.000	0.564	_	_	0.319	
Attitude towards Cruise Service						
T1	0.722	0.654	0.088	8.174	0.428	
T2	1.162	0.859	0.104	11.141	0.738	
T3	1.000	0.789	_	_	0.623	
Purchase Intention	Purchase Intention					
I1	1.000	0.752	_	_	0.565	
I2	1.067	0.859	0.105	10.147	0.738	
I3	1.123	0.819	0.115	9.801	0.671	

Table 8 Correlations between constructs (AVE and squared correlations)

	Emotional appeal	Advertising creativity	Attitude towards cruise service	Purchase intention
Emotional appeal	0.782 ^a			
Advertising creativity	0.288**	0.832 ^a		
Attitude towards cruise service	0.703**	0.309**	0.772 ^a	
Purchase intention	0.595**	0.351**	0.595**	0.811 ^a

Note: ^a The numbers bolded in the diagonal row are square roots of the average variance extracted. Correlation is significant at the 0.01 level (2-tailed).

to have a minimum value of 0.6 for achieving adequate CR (Hair et al., 2010). CR value of emotional appeal, advertising creativity, attitude towards cruise service and purchase intention was 0.825, 0.806, 0.814 and 0.852

respectively, presented in Table 9. All the CR values were larger than the recommended standard. Average variance extracted (AVE) was calculated to state the amount of variance to be captured by the latent construct relative

 ^a SE is an estimation of the standard error of the covariance.
 ^b CR is the critical ratio obtained by dividing the estimate of the covariance by its standard error. A value exceeding 1.96 represents a level of significance of 0.05.

^c Indicates a parameter fixed at 1.0 in the original solution.

Table 9	Composite reliability and	l average variance extracted values
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Dimension	Composite reliability ^a	Average variance extracted ^b
Emotional appeal	0.825	0.612
Advertising creativity	0.806	0.693
Attitude towards cruise service	0.814	0.596
Purchase intention	0.852	0.658

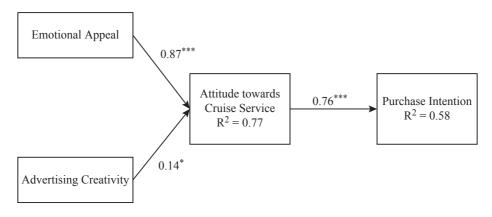
Note: ^a Composite reliability = (sum of standardized loadings)² / [(sum of standardized loadings)² + (sum of indicator measurement error)]. Indicator measurement error can be calculated as 1 – (standardized loading)²; ^b Average variance extracted (AVE) = (sum of squared standardized loadings) / [(sum of squared standardized loadings) + (sum of indicator measurement error)]. Indicator measurement error can be calculated as 1 – (standardized loading)².

to the amount of variance due to measurement error (Fornell and Larcker, 1981). As the lowest AVE shown in Table 9 was 0.596, which was higher than the required standard of larger than 0.5, all constructs achieved an adequate AVE value.

4.7 Hypothesis Testing

A hypothesis testing was conducted to test the proposed hypotheses. All constructs, emotional appeal, advertising creativity, attitude towards cruise service and purchase intention are analyzed by a structural equation model (SEM) shown in Figure 3.

Explained variance (R²), path significance and standardized path coefficient are displayed in the figure. Among the three hypotheses, H1 and H2 were supported with a significant level of 0.01. The result verified that emotional appeal had significant positive effect on the attitude towards cruise service, and attitude had significant positive effect on



Note : p < 0.05 level; p < 0.01 level

Figure 3 Hypothesis testing

purchase intention. For H3, it was found to be significant at a level of 0.05, which supported that there was positive relationship and effect between advertising creativity and attitude towards cruise service. It also indicated that 77% of the variance in attitude towards cruise service was explained by the combining effect of emotional appeal and advertising creativity, while 58% of the variance was explained by attitude towards cruise service.

4.8 Differences of Respondents' Gender, Education Level and Overseas Travel Budget in Perceived Agreement of Cruise Line Advertising Effectiveness

An investigation of the differences between respondents' gender, education level and overseas travel budget of the three indicators of cruise line advertising effectiveness identified from factor analysis was conducted. Emotional appeal (mean = 3.47) was viewed as the most agreed cruise line advertising effectiveness indicators by respondents, followed by advertising creativity (mean = 3.23) and informativeness (mean = 3.07), respectively.

4.8.1 Respondents' Gender and Cruise Line Advertising Effectiveness

As indicated in Table 10, male respondents had the highest mean score for advertising creativity (mean = 3.40), slightly above emotional appeal (mean = 3.31), while female respondents had the highest mean score for emotional appeal (mean = 3.58). Apart from that, the difference in mean score between female respondents and male respondents for emotional appeal and advertising creativity were 0.27 and 0.29, respectively. These results suggest that emotional appeal is the most perceived advertising effectiveness for female respondents.

Table 10 Comparison of differences in respondents' perceptions of advertising effectiveness of cruise line based on gender

Dimensions	Male (N = 63)	Female (N = 90)	F-value	p-value
Emotional appeal	3.31	3.58	4.45	0.03*
Advertising creativity	3.40	3.11	4.86	0.03*
Informativeness	3.12	3.04	0.46	0.49

Note: * Significance level p < 0.05.

4.8.2 Respondents' Education Level and Cruise Line Advertising Effectiveness

Respondents with diploma or associate degree, undergraduate degree, or postgraduate degree recognized emotional appeal as the most agreed cruise line advertising effectiveness indicator (see Table 11). Also, the differences in mean score between respondents with educational levels were not significant. This implies that respondents' perceptions of advertising effectiveness were not influenced by their educational levels.

4.8.3 Respondents' Oversea Travel Budget and Cruise Line Advertising Effectiveness

As shown in Table 12, respondents with overseas travel budget of all levels indicated emotional appeal as the most agreed cruise line advertising effectiveness indicator. The differences in respondents'

perceptions of advertising effectiveness of cruise line based on their educational levels were not significant. Table 12 shows that respondents with overseas travel budget of less than HKD 5,000 per year had the lowest mean scores for all three cruise line advertising effectiveness indicators among other respondents with different overseas travel budget per year. Besides, respondents with overseas travel budget of greater than HKD 20,000 per year for emotional appeal and informativeness were generally higher than for advertising creativity. Apart from emotional appeal being the most effective cruise line advertising indicator, these indicate that cruise line advertisement was having a smaller effect on people with lower overseas travel budget while cruise line should have focused the effects of emotional appeal and informativeness of video advertisement when targeting people with higher overseas travel budget.

Table 11 Comparison of differences in respondents' perceptions of advertising effectiveness of cruise line based on educational degree

Dimensions	DAD (N = 21)	UD (N = 127)	PD (N = 5)	F-value	p-value
Emotional appeal	3.68	3.44	3.40	0.91	0.40
Advertising creativity	3.38	3.22	2.80	1.04	0.35
Informativeness	3.28	3.03	3.20	1.08	0.34

Note: DAD represents diploma or associate degree; UD represents undergraduate degree; PD represents postgraduate degree.

	Annual amount of overseas travel budget (HK\$)								
Dimensions	< 5,000 (N = 26)	5,001 ~ 10,000 (N = 65)	$10,001 \sim 20,000$ (N = 48)	> 20,000 (N = 14)	F value	P value			
Emotional appeal	3.25	3.43	3.59	3.66	1.42	0.23			
Advertising creativity	3.00	3.34	3.27	3.00	1.53	0.20			
Informativeness	2.84	3.11	3.11	3.21	1.12	0.34			

Table 12 Comparison of differences in respondents' perceptions of advertising effectiveness of cruise line based on budget

5. CONCLUSION AND DISCUSSION

5.1 Discussion

Cruise industry is a fast-growing sector of the tourism industry. Through attracting the interest of various passengers, it has become a profitable business in the world. From the global perspective, with high annual growth rate and tremendous increase in number of passengers, cruise industry produces a considerable amount of income for different countries around the world. While from the perspective of Hong Kong, flourishing development of cruise industry is critical to the economy of Hong Kong, which Hong Kong is an Asia Pacific cruise center and one of the most preferable ports of call for passengers and cruise lines. Apart from that, effective advertising is critical to enhance the competitiveness of cruise lines. While advertising effectiveness depends on the quality of the advertisement, prosperous development of cruise lines also depends on the effectiveness of their advertisements. In addition, apart from the fact that the attitude of university students is gradually becoming more important in the consumer market, it is also noticed that cruise travel has started to attract the attention from the younger generations. Apart from that, while limited research has been focusing on advertising effectiveness of cruise line, there were minimal studies on effective advertisement of mobile phone video.

Therefore, this study aims to examine the advertising effectiveness indicators of mobile phone video on increasing the purchase intention of Hong Kong university students for cruise service. Major findings of this research based on questionnaire survey conducted in Hong Kong are summarized as below.

In this study, questionnaire survey was first conducted to measure respondents' level of agreement on the latent constructs in the model, importance of cruise service and facilities and preferences of areas via cruise. After that, factor analysis was conducted from SPSS to reduce, rearrange, and test the variables into critical factors. By applying the collected data into AMOS, a structural equation model (SEM) was further established to test the proposed hypotheses.

The results reveal that emotional appeal is the most important measurement of cruise line advertising effectiveness. Respondents were most likely to be attracted by cruise advertisement with effective emotional appeal, and respondents' attitude towards cruise service would be positively affected after watching such cruise advertisement. Thus, the findings supported the proposed hypothesis that emotional appeal in advertisement is positively associated with the audience's attitude towards cruise service (H2). Apart from that, the effect of advertising creativity on attitude towards cruise service was also significant. Although it is not as significant as emotional appeal, it still has positive effect on attitude towards cruise service. Accordingly, hypothesis that advertising creativity in advertisement is positively associated with the audience's attitude towards cruise service (H4). H3 is invalid because informativeness is not an essential elements of cruise advertisement to influence the attitude towards cruise

service. The results also reveal that there is a positive relationship between attitude towards cruise service and purchase intention (H1). However, the unfavorable responses in the questionnaire survey seem to be inconsistent with the factor analysis which the mean score of purchase intention is not high. This may due to external factors that are not included in the conceptual model, budget may be one of the main constraints. For example, even though positive attitude towards cruise service has been created, university students may think that they do not have enough money for enjoying a cruise trip, hence resulting in a relatively low purchase intention.

Additional information about importance of cruise service and facilities and preference of area was collected from the survey. Results showed that Hong Kong university students were focusing on core attributes (e.g. food and accommodation) and Fitness Attributes (e.g. swimming pools and spa), while supplementary attributes (e.g. business center and library) were less important to them. For preference of areas, respondents had high preference in routes travelling to foreign countries instead of China. The results suggest that if cruise lines target on attracting more young cruisers, quality of core attributes of cruise service should be maintained in a high level and cruise packages for young cruisers

should be focusing on foreign countries in Asia instead of China.

This study has indicated the findings on the relationship between advertising effectiveness, attitude towards cruise service and purchase intention. The findings not only have practical implications to cruise lines, they also offer theoretical implications for researchers.

5.2 Practical and theoretical contributions

Various significant contributions are made by the research. From the practical perspective, emotional appeal as the most perceived advertising effectiveness for mobile phone provides a key implication for cruise lines. Under the booming cruise industry, it is vital to stand out from the intense competition between different cruise lines. A way to enlarge the market share in the industry is to attract customers through various advertisements. While effective advertising is crucial for cruise lines to develop successfully, it is necessary to understand the indicators that lead to the effectiveness of the advertisement. With emotional appeal being the most perceived advertising effectiveness for mobile phone video, cruise lines can now adopt different marketing strategies to enhance their competitiveness. For example, while designing their advertising video for mobile phone, cruise lines can now focus more on the emotional aspect of the video, such as creating appropriate atmosphere to attract the attention of the audience. With this implication, cruise lines can evaluate their current marketing strategies and further improve them to enlarge their market share. It is also indicated that an effective advertisement will affect attitude towards the advertised product or service, and thus affect the intention to purchase the advertised product or service. Hence, if cruise passengers perceive a positive image through effective cruise commercials with a focus on emotional appeal, they are more likely to have a favorable attitude towards the cruise lines, and willing to have a cruise experience. Another contribution of this study is providing a basis for cruise industry to increase the purchase intention of students for cruise service. It is noted that university students are now becoming major targets of different businesses. Lots of companies have been investing to design advertisement to target students. Apart from that, young people are now paying more attention to cruise service which Cruise Line International Association (2016) indicated that cruise service will gain more traction from younger generations. With these recent trends from young consumers, it is important for cruise lines to adopt new strategies and invest in enhancing the purchase intention of students. While mobile phone is becoming an essential garget among young people, cruise lines would be able to attract students for purchase via embedding emotional content in a mobile phone advertising video. Therefore, this study has made practical contributions through indicating important elements for cruise lines to prosper in the market.

From the theoretical perspective, this study also makes notable contributions. Firstly, it enhances our understanding of cruise line advertising effectiveness. It is noticed that minimal studies were on advertising effectiveness of cruise line as many studies had been focusing on motivations for cruise passengers, cruise market and attributes influencing the decision-making of cruise lines. However, from the research, it is indicated that emotional appeal is the most important indicator for cruise line advertising effectiveness while advertising creativity is another crucial indicator for effective cruise advertisement. With these findings, it further enhances our knowledge on advertising effectiveness of cruise lines in the industry. Apart from that, a theoretical contribution is the exploration of advertising effectiveness from mobile phone video. It could be noticed

that many studies have been focusing on the investigation of advertising effectiveness of media other than mobile phone video. Websites, social media and online game banners were being examined from the aspect of advertising effectiveness. Moreover, mobile advertising effectiveness has also been investigated by various research, but it was notes that those studies were focusing only on mobile phone messages. This study makes a significant input by indicating the advertising effectiveness indicators that would influence the audience from mobile phone video. Therefore, important contributions were made from the theoretical perspective.

5.3 Limitations and future research

Where this paper contributes to the literature by evaluating cruise line advertising effectiveness, however, the scope of this study was limited due to time and financial constraints. First, the focus group was targeted only on Hong Kong people, especially students, rather than general public or further to people around the world. The sample size is therefore relatively limited. Second, this research was conducted by using only one cruise advertising video as the representative, and video in English was used instead of Chinese and other languages. Third,

the conceptual framework only specifically focused on investigating three advertising effectiveness indicators. Fourth, this research was focusing on mobile advertising to narrow down the research context

Future research can be conducted in a more comprehensive way. While cruise service is an international activity which gathers customers in the whole world, future research can be done to investigate the advertising effectiveness with general potential cruise passengers based on different countries, occupations, and age groups such as middle-age and senior passengers. After all, seniors are important customers in cruise market. Their perceptions of advertising effectiveness can be examined in the future research. Moreover, this study assessed the effectiveness of cruise advertising which was only based on the video from a particular cruise. Future research can evaluate different cruise advertising videos from well-known cruise companies on advertising effectiveness. This can increase the representation and persuasiveness of the research. In addition, videos used in the studies can include multilanguage to reduce cultural impacts on advertising effectiveness.

When designing the indicators of advertising effectiveness, future studies can explore new factors such as attention, recognition, recall etc. While emotional appeal is crucial indicator affecting the attitude of students towards cruise service discussed in our research, more in-depth can be conducted on promoting and strengthening emotional appeal in cruise line video advertisements. For example, design factors including visual effect, audio effect, appeals etc. can be investigated in future studies. For the media of cruise advertisement, other media can also be used to assess the advertising effectiveness such as web advertising, newspapers etc.

However, the outbreak of the coronavirus in mainland China has greatly impacted the popularity of cruise ship tour market. An effective infection preventive measures in cruise lines could be become an important issue for cruise ship companies to increase the potential passengers' purchase intention to overcome the current market depression.

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Appendix 1: Selected Cruise Line Commercial

YouTube: Harmony of the Seas "Come Seek" TV Commercial: https://www.youtube.com/watch?time_continue=3&v=TTAQYdL8CwU